

SP

Notice of Allowability

Application No.

10/799,702

Applicant(s)

FISHER ET AL.

Examiner

Art Unit

Erica E. Cadugan

3722

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to dk1 8200.652, filed 3/15/2004, and interview of 12/8/05.
2. ☒ The allowed claim(s) is/are 1-11.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|--|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____. |
| 3. <input checked="" type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date 8/19/05 & 3/15/04 | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____. |

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

2. Authorization for this examiner's amendment was given in a telephone interview with George Ayvazov on December 8, 2005.

3. The application has been amended as follows:

Claim 3 (Currently Amended). The method for manufacturing the bevel gear member as defined in claim 2, wherein said unitary workpiece is formed by one of a forging and [casing] casting process.

Claim 5 (Currently Amended). The method for manufacturing the bevel gear member as defined in claim 4, wherein the step of providing said [unitary] bevel gear blank includes the steps of:

forming a bevel gear workpiece having said gearhead and said shaft;

forming said [unitary] bevel gear blank by machining said shaft of said workpiece using a face angle surface of said gearhead of said workpiece as a locating surface for centering of said workpiece.

Claim 6 (Currently Amended). The method for manufacturing the bevel gear member as defined in claim 5, wherein said bevel gear workpiece is formed by one of a forging and [casing] casting process.

In claim 7, line 5, "steps" has been changed to --step--.

Art Unit: 3722

4. The following is an examiner's statement of reasons for allowance:

U.S. Pat. No. 6,536,999 to Bradfield et al. teaches a method for machining a bevel gear member wherein gear teeth are formed on the gear blank "by simultaneously cutting gear tooth top land, gear tooth side profile, and a bottom land" as set forth in independent claim 1 (as indicated by Applicant on page 7, lines 3-10, of the present application, see Figure 1 of '999, for example).

However, '999 does not teach the step of "machining at least one selected surface of said unfinished bevel gear member using said top lands of said gear teeth as a datum for centering said unfinished bevel gear member" as set forth in independent claim 1, and thus, for at least this reasoning, '999 does not anticipate the present invention as set forth in independent claim 1.

Additionally, there is no combinable teaching in the prior art of record that would reasonably motivate one having ordinary skill in the art to so modify the teachings of '999, and thus, for at least this reasoning, '999 does not render obvious the present invention as set forth in independent claim 1.

Note that U.S. Pat. No. 3,635,323 to Helfer et al. teaches various centering and clamping devices (Figures 10, 12, and 14) for centering and clamping a bevel gear workpiece/blank 154. As viewed in the embodiment of Figure 10, Helfer teaches a centering cup 150 that contacts the tapered portion of a gearpiece. However, note that Helfer explicitly teaches that the centering cup 150 is used to hold workpiece blanks that have not been cut at all (col. 7, lines 59-60) or to move "rough cut pinion gear pieces" (col. 7, lines 62-65). Workpiece blanks that have not been cut at all have no teeth therein, and thus, cannot be engaged or centered via any portion of any

Art Unit: 3722

“gear teeth” as set forth in claim 1. Re the “rough-cut pinion gear pieces”, Helfer does not teach that any “top lands” of any teeth thereof are used “as a datum for centering” the workpiece.

Re the embodiment of Figure 12, note that pins 210 engage the gear between its teeth, and thus, do not engage the “top lands” of the gear teeth (see Figure 12 and col. 11, lines 31-35) as set forth in claim 1.

Re the embodiment of Figure 14, the workpiece is engaged by pins 272, for example (col. 14, lines 1-15 and Figure 14). There is no teaching of utilizing “top land” surfaces of the gear teeth as a datum for centering the workpiece as set forth in claim 1.

The aforedescribed prior art being representative examples of the closest prior art of record to the present invention as set forth in independent claim 1, the prior art of record neither anticipates nor renders obvious the present invention as set forth in independent claim 1.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled “Comments on Statement of Reasons for Allowance.”

Conclusion


5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Erica E. Cadugan whose telephone number is (571) 272-4474. The examiner can normally be reached on M-F, 6:30 a.m. to 4:00 p.m., alternate Fridays off.

Art Unit: 3722

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Boyer D. Ashley can be reached on (571) 272-4502. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Erica E Cadogan
Primary Examiner
Art Unit 3722

eec

December 8, 2005